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IN THE CLAIMS:

Please delete Claims 1 - 14 as found in the PCT Publication WO/01/83864 (English translation included herein).

Please enter the following claims:

15 1. A method for producing a ring traveler (10) for ring spinning or ring twisting machines, which has a core (20) consisting of iron material, and comprising the step of subjecting at least a portion of the core (20) to a nitriding treatment during which heat energy and a nitriding agent as active medium are supplied to the core (20).

16 2. The method as claimed in claim *15*, wherein the core (20) is heated to a temperature in the range of 450°C - 600°C.

17 3. The method as claimed in claim *16*, wherein the core (20) is maintained in said temperature range for 3 - 60 hours.

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^{4.} The method as claimed in claim ¹⁵ ¹⁶ ¹⁷ or ⁸, wherein the nitriding agent is supplied in the form of a gas comprising NH₃ and N₂ components, a nitrogen-enriched liquid or a nitrogen-enriched plasma.

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^{5.} The method as claimed in claim ¹⁵, wherein the active medium includes components selected from the group consisting of sulfur components and carbon components.

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^{6.} The method as claimed in claim ¹⁵, wherein method includes the step of polishing the core (20) before the nitriding treatment.

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^{7.} The method as claimed in claim ¹⁵, wherein method includes the step of polishing the core (20) after the nitriding treatment.

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^{8.} The method as claimed in claim ¹⁵, wherein method includes the step of oxidizing the core (20) before the nitriding treatment.

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23. The method as claimed in claim 1, wherein method includes the step of oxidizing the core (20) after the nitriding treatment.

24. 10. A ring traveler (10) for ring spinning or ring twisting machines, comprising an iron core (20) wherein at least one mechanically stressed part of the core (20) has a nitrided edge layer (23, 24).

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25. 11. A ring traveler (10) according to claim 10, wherein the mechanically stressed part of the core (20) comprises a running surface for the thread.

26. 12. A ring traveler (10) according to claim 10, wherein the mechanically stressed part of the core (20) comprises a surface running on the ring of the spinning or twisting machine.

27. 13. A ring traveler (10) as claimed in claim 10, wherein the edge layer (23, 24) includes a connecting layer (23).

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14. A ring traveler (10) as claimed in claim 10, wherein the edge layer (23, 24) includes a connecting layer (23) and a diffusion layer (24).

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A ring traveler (10) as claimed in claim 10, wherein the edge layer (23, 24) includes a diffusion layer (24).

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The ring traveler (10) as claimed in claim 13, wherein the connecting layer (23) has a thickness of 0.1 μ m - 30 μ m.

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The ring traveler (10) as claimed in claim 14, wherein the diffusion layer (24) has a thickness of 1 μ m - 2000 μ m.

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The ring traveler (10) as claimed in claim 14, wherein the connecting layer (23) has a thickness of 8 μ m - 12 μ m and the diffusion layer (24) has a thickness of 100 μ m - 200 μ m.

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19. The ring traveler (10) as claimed in claim 13 wherein the connecting layer (23) contains components selected from the group consisting of sulfur and carbon.

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The ring traveler (10) as claimed in claim 10, wherein the surface (22) of the core (20) is polished and/or is provided with an oxide layer.

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The ring traveler (10) as claimed in claim 20 wherein the surface (22) of the core (20) is black, blue, yellow or white.

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The ring traveler (10) as claimed in claim 10, wherein the basic material (21) of the core (20) is nitriding steel.

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The ring traveler (10) as claimed in claim 13, wherein the basic material (21) of the core (20) contains a nitride-forming element selected from the group consisting of chromium, vanadium, aluminum, molybdenum, manganese and nickel.